

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: ASHUELOT POND	Lake Area (ha): 121.20
Town: WASHINGTON	Maximum depth (m): 7.0
County: Sullivan	Mean depth (m): 1.8
River Basin: Connecticut	Volume (m ³): 2229500
Latitude: 43°09' N	Relative depth: 0.6
Longitude: 72°09' W	Shore configuration: 2.15
Elevation (ft): 1445	Areal water load (m/yr): 29.83
Shore length (m): 8400	Flushing rate (yr ⁻¹): 16.20
Watershed area (ha): 6475.0	P retention coeff.: 0.43
% watershed ponded: 4.6	Lake type: natural w/dam

BIOLOGICAL:

	21 January 1987	23 July 1986
DOM. PHYTOPLANKTON (% TOTAL) #1	ASTERIONELLA 90%	ASTERIONELLA 90%
#2	PERIDINIUM 9%	
#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)		1515.0
CHLOROPHYLL-A (µg/L)		3.71
DOM. ZOOPLANKTON (% TOTAL) #1	CALANOID COPEPODS 33%	NAUPLIUS LARVAE 41%
#2	KERATELLA 33%	KERATELLA 26%
#3	BOSMINA 26%	POLYARTHRA 21%
ROTIFERS/LITER	22	82
MICROCRUSTACEA/LITER	44	88
ZOOPLANKTON ABUNDANCE (#/L)	66	172
VASCULAR PLANT ABUNDANCE		Common
SECCHI DISK TRANSPARENCY (m)		3.5
BOTTOM DISSOLVED OXYGEN (mg/L)	6.1	3.2
BACTERIA (fecal col., #/100 ml) #1		< 10
#2		< 10
#3		< 10

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None
Hypolimnion volume (m³): None

<u>CHEMICAL:</u>			Lake: ASHUELOT POND Town: WASHINGTON		
	21 January 1987		23 July 1986		
DEPTH (m)	1.0	3.0	2.0		5.0
pH (units)	5.2	5.2	5.3		5.2
A.N.C. (Alkalinity)	0.3	0.5	0.3		0.1
NITRATE & NITRITE NITROGEN	0.06	0.08	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.33	0.38	0.26		0.31
TOTAL PHOSPHORUS	0.006	0.008	0.010		0.012
CONDUCTIVITY (μ mhos/cm)	29.6	28.6	25.5		26.1
APPARENT COLOR (cpu)	33	35	30		30
MAGNESIUM			0.34		
CALCIUM			1.2		
SODIUM			2.1		
POTASSIUM			0.20		
CHLORIDE			4		4
SULFATE					
TN : TP	65	58	26		26
CALCITE SATURATION INDEX			6.4		
All results in mg/L unless indicated otherwise					
<u>TROPHIC CLASSIFICATION: 1986</u>					
	D.O.	S.D.	PLANT	CHL	TOTAL CLASS
	**	2	2	0	4 Meso.
<u>COMMENTS:</u>					
<ol style="list-style-type: none"> Whole water phytoplankton was 45% bluegreens, 25% greens, and 20% diatoms. <u>Merismopedia</u> was dominant (45%). This pond was previously surveyed in 1977. There was no change in trophic status. This is a relatively shallow pond, with light tea-colored water. Rooted plants are abundant in the inlet stream and coves. Weed control by harvesting was attempted in 1978. 					

ASHUELOT POND

WASHINGTON

Rough Bathymetric Chart

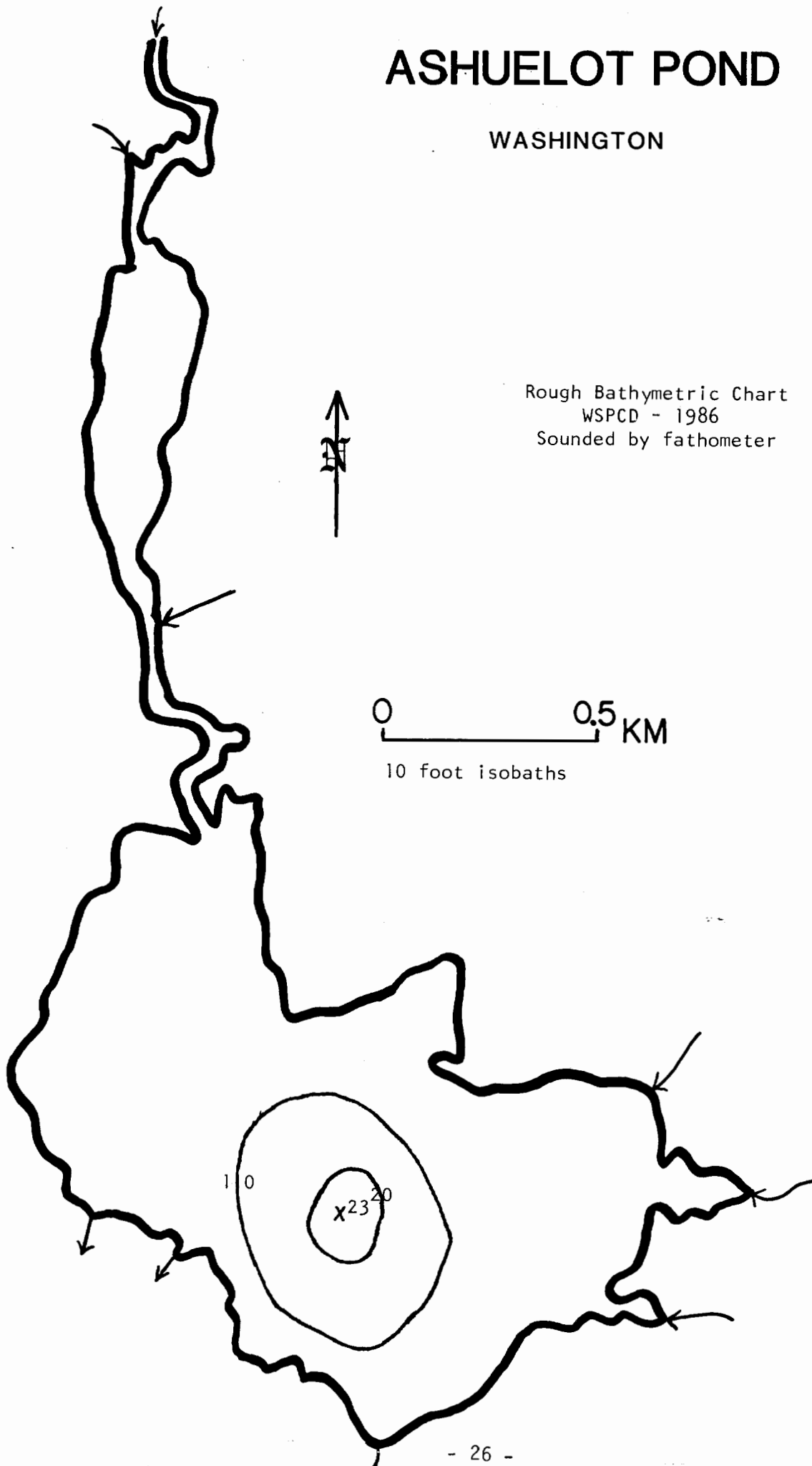
WSPCD - 1986

Sounded by fathometer



0 0.5 KM

10 foot isobaths



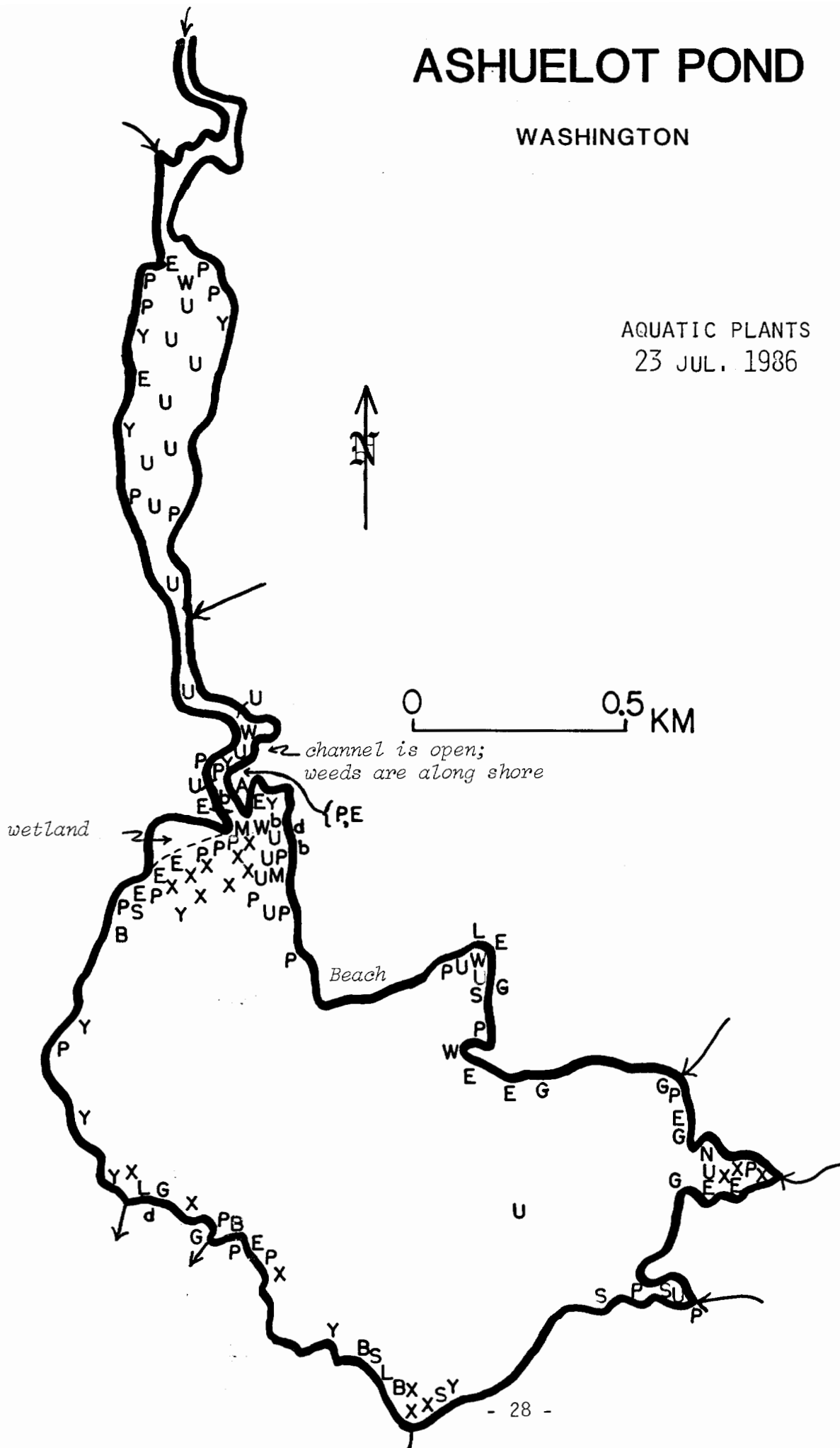
[illegible]

ASHUELOT POND

WASHINGTON

AQUATIC PLANTS

23 JUL. 1986



AQUATIC PLANT SURVEY			
LAKE: ASHUELOT POND		TOWN: WASHINGTON	DATE: 07/23/86
Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
U	Utricularia	Bladderwort	Common
W	Potamogeton	Pondweed	Scattered
P	Pontederia cordata	Pickereelweed	Common
Y	Nuphar	Yellow water lily	Scattered
b	Scirpus	Bulrush	Scattered
E	Eleocharis	Spike rush	Common
M	Myriophyllum humile	Water milfoil	Scattered
A	Sagittaria	Arrowhead	Sparse
B	Brasenia schreberi	Water shield	Scattered
d	Dulichium arundinaceum	Three-way sedge	Sparse
G	Gramineae	Grass family	Scattered
S	Sparganium	Bur reed	Scattered
L	Lobelia dortmanna	Water lobelia	Sparse
N	Nymphaea	White water lily	Sparse
X		Bottom growth	Common
OVERALL ABUNDANCE: Common			
<u>GENERAL OBSERVATIONS:</u> 1. Plants were abundant at the northern end of the pond where the inlet stream enters. Weeds were generally not a problem in the main part of the lake.			